

METHOD AND SYSTEM FOR ACCESSING MEMORY DATA

ABSTRACT

A method and a system for accessing memory data are provided. When an interface unit receives a memory accessing request from a processing unit, a non-cacheable memory buffer unit determines if a memory address corresponds to that in the memory accessing request; if yes, retrieving the memory address; if no, forwarding the memory accessing request to an arbitration unit for accessing data in a memory unit. During transmission of data from the memory unit to the interface unit, the non-cacheable memory buffer unit retrieves the data to simultaneously update stored data. The non-cacheable memory buffer unit pre-reads memory address data following the retrieved data to enhance a data reading speed for the processing unit. During writing data into the memory unit, the non-cacheable memory buffer unit updates the stored data by the written data if a memory address of the written data is identical to that of the stored data.

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